Appl. No. : 10/038,305

Filed: January 2, 2002

## LISTING OF THE CLAIMS

1. (Cancelled).

2. (Previously Presented) The method of Claim 6, wherein the first metal comprises tungsten and the second metal comprises aluminum.

- 3. (Previously Presented) The method of Claim 6, wherein depositing comprises a selective chemical vapor deposition.
- 4. (Original) The method of Claim 3, wherein depositing comprises depositing a ratio of first metal thickness over the conductive element to first metal thickness over insulating surfaces of the dual damascene structure of greater than about 10:1.
- 5. (Previously Presented) The method of Claim 6, wherein filling comprises flowing aluminum at a temperature between about 400°C and 550°C.
  - 6. (Previously Presented) A method of forming an integrated circuit, comprising:

forming a dual damascene structure in insulating material over a semiconductor substrate, the dual damascene structure comprising a trench and a contact via extending from a bottom of the trench to expose a conductive element;

depositing a first metal selectively over the conductive element relative to insulating surfaces of the dual damascene structure to partially fill the contact via; and

filling a remainder of the contact via with a second metal, the second metal being more conductive than the first metal,

wherein depositing the first metal comprises filling the contact via to a height between about one-third and two-thirds of a height of the contact via.

- 7. (Previously Presented) The method of Claim 6, wherein depositing the first metal comprises filling the contact via to a height between about one-half and two-thirds of a height of the contact via.
- 8. (Previously Presented) The method of Claim 6, wherein filling comprises overflowing the contact via to at least partially fill the trench with the second metal.
- 9. (Original) The method of Claim 8, wherein filling comprises a hot aluminum deposition.
- 10. (Original) The method of Claim 9, further comprising following the hot aluminum deposition with a cold aluminum deposition.

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11-16. (Cancelled).

17. (Previously Presented) A method for forming an integrated contact plug, comprising:

forming a dual damascene contact via in insulating material, wherein the dual damascene contact via has a height extending from a conductive element at a bottom of the contact via to a bottom of a dual damascene trench directly over the contact via;

depositing a first metal to fill between about one-thirds and two-thirds of the height of the contact via; and

filling a remainder of the contact via with a second metal, wherein the second metal is more conductive than the first metal and partially fills the trench.

- 18. (Original) The method of Claim 17, wherein depositing comprises filling the contact via to between about one-half and two-thirds of the height of the contact via.
  - 19. (Original) The method of Claim 17, wherein the first metal comprises tungsten.
- 20. (Original) The method of Claim 17, wherein the second metal comprises aluminum.
- 21. (Original) The method of Claim 17, wherein the contact via and the trench are lined with a barrier layer before depositing the first metal.
- 22. (Original) The method of Claim 21, wherein the barrier layer comprises a metal nitride.
- 23. (Original) The method of Claim 17, wherein the contact via and the trench are lined with an adhesion layer before depositing the first metal.